

Customer No.: 31561  
Application No.: 10/708,876  
Docket No.: 12707-US-PA

### REMARKS

#### Present Status of the Application

The Advisory and Final Office Actions rejected claims 1-11. Specifically, the Final Office Action rejected claims 1-11 under 35 U.S.C. 102(b) as being anticipated by Maiocchi (U. S. Patent 5,397,972). Applicants have amended independent claims 1 and 6. Claims 1-11 remain pending in the present application for RCE, and reconsideration of those claims is respectfully requested.

#### Discussion of Claim Rejections

1. In the present invention, it should be noted that the zero-crossing point of BEMF is specifically taken from the floating winding while the other two windings are in the excited state. This condition is necessary. The at least reasons are following. If the zero-crossing point of BEMF for the excited winding (not the floating winding) is taken, the initial condition will change, and the subsequent step can not easily reach the proper startup procedure.

Differently, Maiocchi detects the zero-crossing point from *any one of the three-phase windings* (col. 7, lines 21-23). This would cause the different subsequent procedure.

2. According to the amended claims 1 and 6, clearly, it is not necessary to disexcite the motor when the zero-crossing for the floating winding is detected.

Differently, Maiocchi has to disexcite the motor when the zero-crossing for any one

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winding is detected. In other words, Maiocchi has to *diexcite* the motor and *decode* the detected BEMF ZCP signal since its excited phase are random, and it is necessary to *decide* which phase will commutate to.

*The present invention can directly transfer from initial phase to commutating interval without the diexcite, decode, and decide procedures in Maiocchi.*

3. Due to the initial condition is specifically set, the present invention can easily perform the startup procedure recited in independent claims 1 and 6 and the dependent claims 2-5, 7-11 as well.

For at least the foregoing reasons, Applicant respectfully submits that independent claims 1 and 6 patently define over the prior art, and should be allowed. For at least the same reasons, dependent claims 2-5 and 7-11 patently define over the prior art as well.

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**CONCLUSION**

For at least the foregoing reasons, it is believed that all the pending claims 1-11 of the invention patently define over the prior art and are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

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Respectfully submitted,

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